

Amendments to the Title:

Please delete the title and substitute therefor the following title:

~~System for Reconstituting Pastes and Methods for Using Same Composition For Making A~~
Bone Paste

Amendment to the Specification:

Please delete the two (2) paragraph beginning at page 5, lines 4 and ending at page 5, line 28 (paragraphs 29 and 30) and substitute in its place the following two (2) paragraphs:

The term "paste" as used herein refers to a malleable composition useful in medical procedures. Pastes for use with the principles of the invention include, but are not limited to allograft pastes (e.g., osteogenic pastes or chondrogenic pastes), carrier associated Growth Factors, carrier associated mineralized particles, morsellized skin or other tissue, Fibrin powder, Fibrin/plasminogen glue, biomedical plastics, Demineralized Bone Matrix (DBM)/glycerol, cortico cancellous chips (CCC), DBM/~~pteuronic~~ PLURONIC® F127 surfactant, and DBM/CCC/F127, human tissue/polyesters or polyhydroxy compounds, or polyvinyl compounds or polyamino compounds or polycarbonate compounds or any other suitable viscous carrier; or alpha-BSM® or polyethylene oxide, ~~polyvinylpyrrolidone~~ polyvinylpyrrolidone, polyvinyl alcohol, collagen and dextran. Preferably, pastes used in accordance with the principles of the subject invention are graft pastes having osteogenic or chondrogenic properties. Furthermore, the paste components can include other materials such as, but not limited to, antibiotics, sucrose, dextrose or other biologically compatible anti-caking agents, and optionally, barium, iodine, or other high atomic weight elements for purposes of radioopacity.

In a most preferred embodiment, the paste for use as taught herein contains a carrier, an osteoconductive component, and an osteoinductive component. Carriers can include, but are not limited to, gelatin, collagen, glycerol, hyaluronic acid, chondroitin sulfate, polyethylene

oxide, ~~polyvinylpyrrolidone~~ ~~polyvinylpyrrolidone~~, polyvinyl alcohol, dextran and/or mixtures thereof. Osteoconductive materials suitable for use with the subject invention include, but are not limited to, hydroxapatite (HA), tricalcium phosphate (TCP), CCC, bioactive glass, bioactive ceramics, and/or mixtures thereof. Osteoinductive materials suitable for use with the subject invention include, but are not limited to, DBM, and growth factors such as bone morphogenic protein (BMP), tissue growth factor-beta (TGF-beta), platelet derived growth factor (PDGF) PDGF, and/or mixtures thereof.

Please delete the three (3) paragraphs at page 15, lines 1-18 (paragraphs 62-64) and substitute in their place the following 3 paragraphs:

The inventors have discovered that certain mix of gelatin and DBM sizes which exhibit improved osteogenicity. In a preferred embodiment, the subject invention is directed to a mixture of freeze dried DBM and gelatin, where the DBM comprises certain size ranges. In this example, the ~~paste~~ composition comprises freeze-dried DBM particles having a size of about 125 microns to about 850 microns. Preferably still, the DBM particles are about 250 microns to about 500 microns in size, which has exhibited enhanced osteogenicity. Furthermore, the gelatin in the paste of this example is about 125 microns to about 710 microns. Preferably still, the gelatin is about 500 to about 710 microns in size. In determining the appropriate size ranges, consideration must be given to dissolution and percolation balance: smaller particles dissolve better and larger particles provide a more balanced percolation.

In an even more preferred embodiment, the ~~paste~~ composition further comprises and exothermic salt, such as but not limited to, Magnesium sulfate, Magnesium chloride, Sodium sulfate, and the like and combinations thereof. The addition of the exothermic substance causes the mixture to heat upon contact with the reconstitution fluid which aids in the dissolution of the gelatin and other components in the ~~paste~~ mixture.

[0064] The ~~paste~~ composition can be stored indefinitely at room temperature and is osteogenic upon reconstitution.